

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION DR-344

Effective January 1, 2009

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **February 2010**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Series 05 Aluminum Clad Wood Ascent French Sliding Glass Doors, Non-impact Resistant, manufactured by:

Eagle Window and Door
2045 Kerper Blvd
Dubuque, IA 52001
563-556-2270
www.eaglewindow.com

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Aluminum Clad Wood French Sliding Glass Doors are extruded aluminum clad wood French sliding glass doors. The aluminum clad wood French sliding glass doors evaluated in this report are individual, non-impact resistant doors based on the following tested constructions.

General Description:

System	Description	Label Rating
1	Aluminum Clad French Sliding Glass Doors; (XO)	SGD-R50 (72x96)
2	Aluminum Clad French Sliding Glass Doors; (XO)	SGD-C40 (96x96)

Product Dimensions:

System	Overall Frame Size	Sliding Panel Size	Fixed Panel Size
1	71 $\frac{3}{4}$ " x 96"	37 $\frac{3}{16}$ " x 92 $\frac{7}{8}$ "	37 $\frac{3}{16}$ " x 92 $\frac{7}{8}$ "
2	95 $\frac{3}{4}$ " x 96"	49 $\frac{3}{16}$ " x 92 $\frac{7}{8}$ "	49 $\frac{3}{16}$ " x 92 $\frac{7}{8}$ "

Glazing Description:

System	Glass Construction ¹	Glazing Method ²
1	IG-1	GM-1
2	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The door contains sealed insulating glass units. The sealed insulating glass unit is comprised of two sheets of nominal ($\frac{5}{32}$ ") clear tempered glass separated by a stainless steel spacer system. The glass thickness used in the insulating glass unit of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass unit is set from the interior against glazing shims with a backbedding of silicone and butyl tape. Neoprene glazing stops are used at the glazing pocket perimeter. Wood glazing stops secure the insulating glass units in place from the interior. The wood glazing stops are secured to the frame with brads spaced 2 inches from each corner and 6 to 9 inches on center.

Frame Construction (System 1): The wood frame members consisted of laminated veneer lumber at the head and jambs, the sill was made of fiberglass. The frame corners at the head were square cut, foam gasket applied and employed a nylon sill riser block at each end, silicone sealed and secured with three No. 8 x $2\frac{1}{4}$ " screws per corner. A wood parting stop is used at the frame head and jamb of the stationary panel and secured through the wood frame member with wire brads spaced approximately 6 inches on center. An extruded aluminum parting stop was used at the frame head and jamb of the sliding panel. Set in silicone and secured at the head with No. 6 x $1\frac{1}{4}$ " screws spaced approximately 17 inches on center and secured to the frame jamb with No. 6 x 1" screws spaced approximately 12 inches on center. An aluminum guide track was used at the interior leg of the frame head and secured with No. 8 x $\frac{3}{4}$ " screws approximately 12 inches on center. The fiberglass sill used wood trim at the interior which had double-sided tape between the wood and fiberglass and the trim was secured with No. 6 x $1\frac{1}{4}$ " screws spaced approximately 12 inches on center.

Aluminum Cladding (System 1): The extruded aluminum cladding at the head is slip-fit over the wood frame members with the corners miter cut, silicone sealed, nylon corner keyed, and secured with one No. 5 x $1\frac{3}{4}$ " screw per corner. The cladding at the sill was square cut, foam gasket applied, silicone sealed, and secured through the fiberglass sill to the cladding with one No. 6 x 1" screw per end. The sill had a vinyl stationary support block at the stationary panel which was set in a continuous bed of silicone and secured through the fiberglass sill to the support block with No. 10 x 1" screws spaced 10-13 inches on center.

Panel Construction (System 1): The wood frame members consisted of laminated veneer lumber. The frame corners are butt joint construction glued and used two wood dowels per corner and secured with two $2\frac{1}{2}$ " wire brads per end dowel. The stationary panel has a wood filler block between the frame head and the top rail of the panel. The stationary panel and filler bar are anchored to the frame at the head and jambs through the frame with No. 8 x $2\frac{1}{8}$ " spaced approximately 19 inches on center. The sliding panel has a vinyl drip leg at the bottom rail. A closed cell foam tape is used between the bottom rail and vinyl drip leg and secured with No. 6 x 1" screws spaced approximately 6 inches on center.

Aluminum Cladding (System 1): The extruded aluminum cladding at the exterior is slip-fit over the wood frame members with the corners square cut, coped, silicone sealed, and snap-fit to the wood sash members. The cladding at the sill was square cut, foam gasket applied, silicone sealed, and secured through the fiberglass sill to the cladding with one No. 6 x 1" screw per end.

The aluminum cladding on the stationary panel is set in a continuous bed of silicone and secured through with No. 8 x 1" screws spaced approximately 22 inches on center.

Frame Construction (System 2): The wood frame members consisted of laminated veneer lumber at the head and jambs, the sill was made of fiberglass. The frame corners at the head were square cut, rabbet joint, silicone sealed and secured with three No. 8 x 1 $\frac{3}{4}$ " screws per corner. The sill corners are square cut, foam gasket applied and also have a nylon sill riser block at each end, then silicone sealed and secured with three No. 8 x 2 $\frac{1}{2}$ " screws per corner. A wood parting stop is used at the frame head and jamb of the stationary panel and secured through the wood frame member with wire brads spaced approximately 6 inches on center. An extruded aluminum parting stop was used at the frame head and jamb of the sliding panel, set in silicone and secured at the head with No. 6 x 1 $\frac{1}{4}$ " screws spaced approximately 17 inches on center and secured to the frame jamb with No. 6 x 1" screws spaced approximately 12 inches on center. An aluminum guide track is used at the interior leg of the frame head and secured with No. 8 x $\frac{3}{4}$ " screws approximately 12 inches on center. The fiberglass sill uses a wood trim at the interior which had double-sided tape between the wood and fiberglass and the trim was secured with No. 6 x 1 $\frac{1}{4}$ " screws spaced approximately 12 inches on center.

Aluminum Cladding (System 2): The extruded aluminum cladding at the head is slip-fit over the wood frame members with the corners miter cut, silicone sealed, nylon corner keyed, and secured with one No. 5 x 1 $\frac{3}{4}$ " screw per corner. The cladding at the sill is square cut, foam gasket applied, silicone sealed, and secured through the fiberglass sill to the cladding with one No. 6 x 1" screw per end. The sill had a vinyl stationary support block at the stationary panel which was set in a continuous bed of silicone and secured through the fiberglass sill to the support block with No. 10 x 1" screws spaced 10-13 inches on center. Extruded aluminum cladding is slip-fit to the PVC support block at the exterior.

Panel Construction (System 2): The wood frame members consisted of laminated veneer lumber. The frame corners are butt joint construction glued and used two wood dowels per corner and secured with two 2 $\frac{1}{2}$ " wire brads per end dowel. The stationary panel has a wood filler block between the frame head and the top rail of the panel. The stationary panel and filler bar are anchored to the frame at the head and jambs through the frame with No. 8 x 2 $\frac{1}{8}$ " spaced approximately 19 inches on center. The sliding panel has a vinyl drip leg at the bottom rail. A closed cell foam tape is used between the bottom rail and vinyl drip leg and secured with No. 6 x 1" screws spaced approximately 6 inches on center.

Aluminum Cladding (System 2): The extruded aluminum cladding at the exterior is slip-fit over the wood frame members with the corners square cut, coped, silicone sealed, and snap-fit to the wood sash members.. The cladding at the sill was square cut, foam gasket applied, silicone sealed, and secured through the fiberglass sill to the cladding with one No. 6 x 1" screw per end. The aluminum cladding on the stationary panel is set in a continuous bed of silicone and secured through with No. 8 x 1" screws spaced approximately 22 inches on center.

Hardware Description:

Hardware Systems 1-2:

<u>H-1 Description</u>	<u>Quantity</u>	<u>Location</u>
Handle Set	1	Sliding panel, 38 1/2" from bottom rail
2-point lock and keeper	1/each	Sliding and fixed panels 38 1/2" from bottom rail
Stainless steel track cap	1	Interior sill track
Stainless steel tandem roller	2	Bottom rail of sliding panel 7" from ends
Bumper stop with retainer	1	Interior corners at head
Vinyl guide block	2	Sliding panel, top rail 4" from ends

Product Identification:

Systems 1-2: A certification program label (WDMA) will be affixed to the door. The certification program label includes the manufacturer's name, product name: **Clad French Sliding Glass Doors**; performance characteristics; the approved inspection agency (WDMA); and the applicable standard: AAMA/WDMA/CSA I.S.2/A440-05 and ANSI/AAMA/WDMA 101/I.S.2-97.

LIMITATIONS

Design pressures (DP):

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
1	72	96	±50
2	96	96	±40

Impact Resistance: These door assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These door assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Doors assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The door assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

Systems 1 and 2: The wall framing shall be minimum Southern Yellow Pine dimension lumber. The door is installed with the nail flange secured with minimum 12 gauge smooth shank roofing nails spaced approximately 4 inches from each corner and approximately 7 inches on center. In addition, the frame head is secured to the wall framing with No. 10 x 2 1/2" screws space 6 inches from the ends and 27 inches on center at the head. The frame jambs have No. 10 x 2 1/2" screws 6 inches from each end and at the midspan. The fasteners shall be long enough to penetrate a minimum of 1 1/2 inches into the wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.